KONECNY, Robert, doc.

The psychological basis of sexual relations. Cesk. gyn. 26 [40] no.5:340-347 Je '61.

1. Psychiatricka klinika UJEvP v Brne, prednosta prof. dr. J.Hadlik.
(SEX BEHAVIOR psychol.)

Konecny, S. ; Provaz, J.

Konecny, S. ; Provaz, J. Tesia ZVP 3 set for selective reception. p. 355

Vol. 4, no. 12, Dec. 1956
SDELOVACI TECHNIKA
TECHNOLOGY
Czechoslovakia

So. East European Accessions, Vol. 6, May 1957
No. 5,

KONECNY, S.

TECHNOLOGY

**Periodical:** SDELOVACI TECHNIKA. Vol. 6, no. 11, Nov. 1958.

KONECNY, S. Notes on some economic problems of work with printed circuits. p. 431.

Monthly List of East European Accession (EEAI) LC, Vol. 8, no. 3
March 1959 Unclass.

KONECNY, Stanislav

Problems of determining the standardization coefficient in the analyses of electronic equipment. Normalizace 12 no.1:1-5 Ja'64.

1. Tesla Hloubetin, n.p., Praha.

KONECNY V

Thermodynamic properties of molecular nitrogen. Václav Konečný (Inst. Machine and El. Technol., Pilsen, Czech.). *Jaderná energie* 5, 338-9(1959).—With a view to the use of $N_2$ as a reactor coolant, equations and graphs, taken from literature data, are given for the compressibility as a function of pressure, sp. heat at const. pressure as a function of temp., Prandtl no. as a function of temp. at 1 atm., dynamic viscosity as a function of temp. at 1 atm. and 100 atm., heat cond. at 1 atm. as a function of temp., and the ratio of sp. heats as a function of pressure at several fixed temps.

H. Newcombe

4

1-EN(TV)

art

KONECNY, V.

Soil mechanics and its bearing on the technology of stripping in the lignite basins of northern Bohemia. p. 331.

UHLE. (Ministerstvo paliv) Praha, Czechoslovakia, Vol. 1, no. 10, Oct. 1959.

Monthly List of East European Accession (EEAI), LC Vol. 9, no. 2, Feb. 1960.

Uncl.

KONECNY, V.

"Unutilized possibilities of reducing the weight of buildings. p. 99"

STAVBA. (Poverenictvo stavebnictva) Bratislava, Czechoslovakia, Vol. 6, No. 4
Apr. 1959

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 6 June 1959
Uncl.

KONECNY, Vlastimil, inz.

Quick determination of the course of the dangerous sliding surface of a slope and its center. Inz stavby 12 no.7:316-319 Jl'64

1. Research Institute of Lignite, Most.

TLAMICHA, A.; KONECNY, Z.

Broad band noise generator. Biul astr Cz 15 no. 4:136-137 '64.

1. Astronomical Institute, Czechoslovak Academy of Sciences, Ondrejov (for Tlamicha). 2. J.E.Purkyne University, Brno (for Konecny).

KONECNY,Z.; FAJKOSOVA, D.

Plastic surgery of the larynx in specific obliteration. Cesk. otolaryng. 13 no.3:156-160 Je'64

1. ORL oddeleni nemocnice v Novem Meste na Morave (veduci: MUDr. Z.Konecny); Klinika tuberkulozy UDL v Praze (prednosta: doc.dr. R.Krivinka) a Tbc a ORL oddeleni ceskoslovenske nemocnice v Hai Phongu, VDR.

KONECNY, Zd., MUDr.

Tuberculous bacilli in the upper respiratory tract. Cesk. otolar. 5 no.1:39-43 Feb 56.

1. ORL oddeleni SON v Novem Meste na Morave, prim. MUDr. Zd. Konecny.
(TUBERCULOSIS,
upper resp. tract, statist. (Cz))
(RESPIRATORY TRACT, dis.
tuberc, of upper tract, statist. (Cz))

RAMIK, Zdenek, inz.; KONECNY, Zdenek

Cleaning of deposits on steam turbine blades by ash blasting. Energetika Cz 11 no.2:83-84 F '61.

KONECSNI, I.; PALOTAS, J.

Do the photometers of the Pulfrich system exert an effect on measurement results in paprika investigations? p. 199.

ELELMEZESI IPAR. Budapest, Hungary. Vol. 13, no. 6, June 1959.

Monthly List of East European Accessions (EEAI), LC. Vol. 8, No. 9, September 1959
Uncl.

PALOTAS, Jozsef, dr.; KONECSNI, Istvan

Are the results of paprika color measurements influenced by various types of the Pulfrich photometer? Elelm ipar 13 no.6:199 Je '59.

1. Orszagos Mezogazdasagi Minosegvizsgalo Intezet.

PALOTAS, Jozsef, dr.; KONECSNI, Istvan

Do Pulfrich photometers effect the measuring results in paprika tests? Elelm ipar 13 no.6:199 Je '59.

1. Orszagos Mezogazdasagi Minosegvizsgalo Intezet.

KONECSNY, Ferenc

Application of turbo compressors in the refrigerating industry. Ipari energia 2 no.5:113-116 My '61.

1. Tudomanyos munkatars, Hotechnikai Kutato Intezet.

KONECZNA, H.

The roentgenographic method in experimental phonetics. p. 24

NUKLEONIKA. (Polska Akademia Nauk. Komitet do Spraw Pokojowego Wykorzystania Energii Jadrowej)
Warszawa. Vol. 3, no. 2, 1958
Poland/

Monthly List of East European Accessions Index (EEAI), LC, Vol. 8, no. 6, June 1959
Uncl.

POLAND/Physical Chemistry - Solutions, Theory of Acids and Bases. B-11

Abs Jour: Referat. Zhurnal Khimiya, No 2, 1958, 3947.

Author : Antoni Basinski, Maria Koneczna.
Inst :
Title : Solubility of Silver Pyrophosphate in Alkali Pyrophosphates.

Orig Pub: Roczn. chem., 1956, 30, No 4, 1077-1082.

Abstract: The solubility of $Ag_4P_2O_7$ (I) in the solution of $Na_4P_2O_7$ (II) of various concentration was investigated at 20, 30, 40, 50 and 60°. It was revealed that the solubility rises with the II concentration. The solubility of I in II solutions rises with the temperature rise up to 50°, after which it drops. It was found that the solubility of I in $K_4P_2O_7$ solutions is considerably higher than in equimolar II solutions.

Card : 1/1 Univ Torun, Poland.

KONECZNY, H.; PISCHINGER, E.

"Modification of the Solvay Process." P. 181. (PRZEMYSL CHEMICZNY, Vol. 10, No. 4, Apr. 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 1, Jan. 1955 Uncl.

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KONECZNY H.

POLAND/Chemical Technology - Chemical Products and Their Application - Elements, Oxides, Mineral Acids, Alkalis, Salts. H.

Abs Jour : Ref Zhur - Khimiya, No 11, 1958, 36790

Author : Phischinger, E., Koneczny, H.

Inst : -

Title : Effect of Temperature on the Carbonization Efficiency in the Soda Process.

Orig Pub : Przem Chem., 1956, 12, No 11, 629-632

Abstract : Effect of the solutions' temperature increase (optimum temperature being 26-28°C) on ammonia-soda process was determined. A study was conducted on the possibility of compensation for the negative effect of temperature increase, by a positive action of $NH_4^+$ concentration increase under constant partial pressure $P(P = P_{CO_2} + P_{NH_3} + P_{H_2O})$ and constant concentration of $Cl^-$.

Card 1/3

18

POLAND/Chemical Technology. Chemical Products and Their Applications. Elements. Oxides. Mineral Acids. Bases. Salts.

H-8

Abs Jour : Ref Zhur-Khimiya, No 7, 1959, 23942

Author : Koneczny, H.

Inst : -

Title : Conditions for Carbonization with Ammonia-Soda Process.

Orig Pub : Studia Soc. scient. torumemsic, 1957, B1, No 4, 56

Abstract : Investigation of the carbonization was conducted using concentrated brine at 25, 30, 35, 40, and 45° and at 2 atm pressure. Solubility of $NaHCO_3$ in $NH_4Cl$ solution was investigated employing the starting concentration

Card : 1/3

H-32

POLAND/Chemical Technology - Chemical Products and Their Application, Part 2. - Elements, Oxides, Mineral Acids, Bases, Salts. - Soda Industry. H-8c

Abs Jour : Ref Zhur - Khimiya, No 14, 1958, 47335

3

Author : E. Pischinger, H. Koneczny
Inst : -
Title : Influence of $NH_3$ Introduction into Carbonization Column on Performance of Carbonization Process.

7

Orig Pub : Przem. chem., 1957, 13, No 9, 524-527

Abstract : It was experimented at a factory with the introduction of $NH_3$-gas into the middle of a carbonization column at 40°, and the column performance reached 75% (it was 65% without $NH_3$ introduction). It shows that it is necessary to introduce $NH_3$ into the column in summer time, when the temperature of the cooling water is high.

MJI

Card 1/1

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KONECZNY, H.; PISCHINGER E.

The limiting pressure in the process of saturation with carbon dioxide. p. 160.

PRZEMYSL CHEMICZNY. (Ministerstwo Przemyslu Chemicznego i Stowarzyszenie Naukowo-Techniczne Inzynierow i Technikow Przemyslu Chemicznego) Warszawa, Poland. Vol. 38, no. 3, Mar. 1959.

Monthly List of East European Accessions (EEAI) LC. Vol. 8, no. 7, July 1959.

Uncl.

KONECZNY, Henryk; CYLKA, Zofia; PISCHINGER, Ernest

Analysis of the liquid phase in the carbonation process in the soda industry. Przem chem 41 no.6:312-313 Je '62.

1. Katedra Technologii Chemicznej, Uniwersitet im. M.Kopernika, Torun.

KONECZNY, Henryk; SZWED, Zdzislaw; PISCHINGER, Ernest

Influence of expansion upon the yield of the soda processes. Przem chem 41 no.7:382-386 Jl '62.

1. Katedra Technologii Chemicznej, Uniwersytet M.Kopernika, Torun.

KONECZNY, Henryk

Problem of decreasing the loss of ammonia in the carbonisation column in the soda production process. II. Przem chem 41 no.11:643-646 N '62.

1. Katedra Technologii Chemicznej, Uniwersytet, Torun.

KONECZNY, Henryk

Decreasing ammonia losses in the carbonation column in the soda production process. I. Przem chem 41 no.10:558-560 0 '62.

1. Katedra Technologii Chemicznej, Uniwersytet im. M. Kopernika, Torun.

KONECZNY, Henryk

Problem of decreasing the ammonia losses in the carbonation tower during the soda production process. Pt. 3. Przem chem 42 no.6:293-296 Je '63.

1. Katedra Technologii Chemicznej, Uniwersytet, Torun.

GUSTOWSKI, Aleksander; KONMTKA, Henryk

Underdevelopment of the genital system and beasts in amenorrhea related to hormonal factors. Gin.polska 30 no.3:327-334 My-Je '59.

1. Z Poradni Endokrynologicznej dla Kobiet w Warszawie Kierownik: doc. dr med. J. Teter.

(HYPOGONADISM)
(AMENORRHEA)

Konek, Laszlo

**HUNG.**

✓ 6.7-326

551.526:615.834

Riess, Ede; Pál, István and Konek, László, Gyógyhely-klimatológiai vizsgálatok a Mátrában. [Climatological investigation of health resorts in the Mátra Mountains.] *Időjárás*, Budapest, 58(4):197-205, July/Aug. 1954. 18 refs. Russian and French summaries p. 197. MH-BH—Biologically relevant climatic properties of Mátraháza, Hungary (el. approx. 2000 ft) are outlined (sunshine duration, solar and sky radiation, cloudiness, precipitation, humidity, visibility, pressure, wind conditions, frequency of frontal passages). As a result of a survey made on 100 residents of the Mátraháza sanitarium in the fall of 1952, various changes in their normal, submorbid and morbid functions are outlined. The effect of frontal passages on the condition of patients is considered. *Subject Headings:* 1. Medical climatology 2. Health resorts 3. Mátra Mountains, Hungary.—*G.T.*

2

BERNATHNE PARTOS, Alice, dr.; FORGACS, Peter, dr.; KONHEK, Laszlo, dr.;
KISS, Anna T., dr.

Data on the clinical evaluation of the agar-agar fixation reaction. Orv.hetil 100 no.44:1583-1585 N '59.

1. Az Orszagos Reuma es Furdougyi Intezet (igazgato foorvos: Farkas Karoly dr. az orvostudomanyak doktora) es a Balneologiai Kutato Intezet (vezeto: Schulhof Odon dr. az orvostudomanyok kandidatusa) "C" reuma osztalyanak (foorvos: B. Partos Alice dr.) kozlemenye.

(NEOPLASMS diag.)
(RHEUMATISM diag.)
(ARTHRITIS diag.)
(SERODIAGNOSIS)

TOLSTOPYATOVA, A.A.; KONEKO, I.R.; BALANDIN, A.A.

Catalytic properties of yttrium oxide. Conversions of alcohols and hydrocarbons. Kin. i kat. 2 no.1:135-143 Ja-F '61. (MIRA 14:3)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR.
(Yttrium oxide)
(Alcohols)
(Hydrocarbons)

TABUNSHCHIKOVA, O.K.; KONEKOV, K.S.

Apparatus for studying phase equilibria of hydrocarbon systems at low temperatures. Trudy VNIIGAZ no.17:265-269 '62. (MIRA 15:12)
(Chemical equilibrium) (Gas, Natural—Separation)
(Condensate oil wells—Equipment and supplies)

L 05241-67 EWT(d)/EWP(l) IJP(c) GG/BB
ACC NR: AR6020533
SOURCE CODE: UR/0372/66/000/001/G030/G030

38
B

AUTHOR: Karn, E; Konelli, E.; Khalpern, P.; Logan, B.

TITLE: Self-organizing binary logic element 16U

SOURCE: Ref zh. Kibern, Abs. 1G210

REF SOURCE: Sb. Probl. bioniki. M., Mir, 1965, 429-457

TOPIC TAGS: self organizing system, binary logic, logic element, mathematic logic, learning mechanism

ABSTRACT: A model of a learning system is presented and the problem of optimizing learning systems with respect to any set of functions is considered. The results of the modeling of the characteristics of a self-organizing binary logic network and certain other networks are analyzed; it is shown that in all the experiments the self-organizing binary logic network has a shorter learning time. 15 illustrations. Bibliography of 5 titles. V. L. [Translation of abstract]

SUB CODE: 09, 05

Card 1/1

UDC: 62-506.2:15:62-501.72

KONEL'SKAYA, V.N.

USSR/Physics - Absorption spectra

Card 1/1 Pub. 43 - 32/62

Authors : Bugay, P. M., and Konel'skaya, V. N.

Title : Ultraviolet and visible absorption spectra of certain nitro derivatives of diphenylamine

Periodical : Izv. AN SSSR. Ser. fiz. 18/6, 695-697, Nov-Dec 1954

Abstract : A spectral analysis of certain nitro-derivatives of diphenylamine showed that the nitro-group, being an auzochrome, affects the nature of the curve of the absorption spectrum. It was established that the reaction between a bimolar sodium alcoholate solution with diphenylamine nitro-derivatives results in the formation of quincid molecules which in turn produce ionic, deeply-colored salts. Concentrated sulfuric acid combined with nitro-derivatives of diphenylamine form the ion-azenium type. Data regarding absorption spectra of diphenylamine nitro-derivatives are tabulated. Four references: 1 USSR, 1 USA, 1 French and 1 German (1907-1951). Table; graphs.

Institution: The V. I. Lenin Polytechnicum, Kharkov

Submitted : .....

KONEL'SKAYA, V. N.

USSR/Physical Chemistry - Molecules. Chemical Bonds. B-4

Abs Jour: Ref Zhur-Khimiya, No 5, 1957, 14380

Author : P. M. Bugay, V. N. Konel'skaya
Inst : Kharkov Polytechnical Institute
Title : Absorption spectra of o-nitro derivatives of diphenylamine and their comparison with the absorption spectra of its analogous n-nitro derivatives

Orig Pub: Tr. Kharkovsk. polytekhn. in-ta, 1956, 8, 77-87

Abstract: On the basis of a study of absorption spectra (A.S) of 2-nitro-, 2,2'-dinitro- and 2-metoxi-2'-nitrodiphenylamines in alcohol, mixture of alcohol $+C_2H_5ONa$ and concentrated $H_2SO_4$ and after comparison with analogous data for n-nitro derivatives (see ref. above), the authors assumed that in the case of ortho-derivative $C_2H_2ONa$ causes the formation of quinoid structure, whereas $H_2SO_4$ causes the formation of azine salts, with the corresponding deepening of color. $\lambda$ (max) lg $\varepsilon$ and absorption spectra curves are presented.

Card 1/1

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AUTHORS: Bugay, P. M., Konel'skaya, V. N. SOV/153-2-1-9/25

TITLE: Absorption Spectra of 2-Nitro-diphenyl Amine and of Its N-Methyl-,N-Acetyl-, and N-Nitroso Derivatives (Spektry pogloshcheniya 2-nitro-difenilamina i yego N-metil-N-atsetil- i N-nitrozo-proizvodnykh)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1959, Vol 2, Nr 1, pp 46-50 (USSR)

ABSTRACT: The above-mentioned compounds were synthesized and investigated by the photometric method in order to study the problem of hydrogen bonds in the o-nitro-diphenyl amine derivatives, and the action of the functional groups introduced into the amino group of o-nitro-diphenyl amine. This article contains the spectrophotometric results obtained by investigating dioxane and ethanol with 2-nitro-di-phenyl amine, 2-nitro-N-acetyl diphenyl amine, 2-nitro-N-nitroso-diphenyl amine, and 2-nitro-N-methyl diphenyl amine. Figure 1 shows the absorption spectra of dioxane, and figure 2 that of ethanol. The table (on p 49, no Nr given) shows the spectra in dioxane and ethanol of 2-nitro-diphenyl amine as well as of its derivatives. It follows from a comparison between the curves of these spectra that 2-nitro-

~~Card 1/3~~

Absorption Spectra of 2-Nitro-diphenyl Amine and of Its N-Methyl-, N-Acetyl-, and N-Nitroso Derivatives SOV/153-2-1-9/25

diphenyl amine contains a hydrogen bond between the amino- and the nitro group, while it is lacking in 2-nitro-methyl diphenyl amine. The difference between the spectrum curves indicates the change caused by splitting the hydrogen bond. By introducing a $CH_3CO$- and NO group into the amino group of 2-nitro-diphenyl amine the nature of the absorption spectra is abruptly changed and the groups mentioned paralyze to a certain extent the influence of the nitro group in ortho-position. There results a strongly competing effect of these substituents. All substances under investigation retain the same nature of the absorption spectra, both in dioxane and ethanol. Dioxane exhibits a somewhat higher absorptive intensity than ethanol. There are 2 figures, 1 table, and 7 references, 2 of which are Soviet.

ASSOCIATION: Khar'kovskiy politekhnicheskiy institut imeni V. I. Lenina; Kafedra obshchey i neorganicheskoy khimii (Khar'kov Polytechnic Institute imeni V. I. Lenin, Chair of General and Inorganic Chemistry)

~~Card 2/3~~

LUTSKIY, A.Ye.; KONEL'SKAYA, V.N.

Intramolecular hydrogen bond and absorption spectra in the ultraviolet. Part 8: Electron spectra of N-methyl- and N-phenyl-substituted nitrobenzenes. Zhur. ob. khim. 30 no.11: 3773-3782 N'60.
(MIRA 13:11)

1. Khar'kovskiy politekhnicheskiy institut.
(Hydrogen bonding) (Benzene--Spectra)

LUTSKIY, A.Ye.; KONEL'SKAYA,V.N.; KONDRATENKO, B.P.

Intramolecular hydrogen bond and absorption spectra in the ultraviolet. Part 9: Nitroacetanilides and Nitro-N-acetyldiphenylamines. Zhur. ob. khim. 30 no.11:3782-3789 N'60. (MIRA 13:11)

1. Khar'kovskiy politekhnicheskiy institut.
(Hydrogen bonding) (Acetanilide) (Diphenylamine)

LUTSKIY, A.Ye.; KOMEL'SKAYA, V.N.; BUGAY, P.M.

Electron spectra of nitrosamines of the aromatic series. Zhur. ob. khim. 30 no.11:3789-3795 N'60. (MIRA 13:11)

1. Khar'kovskiy politekhnicheskiy institut.
(Amines--Spectra)

LUTSKIY, A.Ye.; KONEL'SKAYA, V.N.

Intramolecular hydrogen bonds and dipole moments of nitrodiphenylamines and some of their derivatives. Zhur.fiz.khim. 35 no.9:1938-1943 '61. (MIRA 14:10)

1. Khar'kovskiy politekhnicheskiy institut imeni V.I. Lenina.
(Diphenylamine--Dipole moments)
(Hydrogen bonding)

BUGAY, P.M.; KONEL'SKAYA, V.N.; GOL'BERKOVA, A.S.; BAZHENOVA, L.M.

Electronic spectra and the nature of absorption bands of aromatic amine derivatives. Part 3. Zhur.fiz.khim. 36 no.10:2233-2235 O '62. (MIRA 17:4)

1. Khar'kovskiy politekhnicheskiy institut imeni Lenina.

BUGAY, P. M.; KONEL'SKAYA, V. N.; GOL'BERKOVA, A. S.

Electron spectra and the nature of the absorption bands of aromatic amine derivatives. Part 4: Electron spectra and the nature of the absorption bands of acetyl derivatives, N-hydroxy-, and N-nitroso derivatives of diphenylamine. Zhur. fiz. khim. 36 no.12:2754-2757 D '62. (MIRA 16:1)

1. Khar'kovskiy politekhnicheskiy institut imeni Lenina.

(Diphenylamine—Spectra)

BUGAY, P. M.; KONEL'SKAYA, V. N.; GOL'BERKOVA, A. S.; BAZHENOVA, L. M.; and NAYDENOVA, I.I

"Issledovaniye metodom elektronnykh spektrov kinetiki okisleniya orto oksi-i metoksi-proizvodnykh difenil-amina v 98% H SO vo vremeni i ustanovleniye prirody polos pogloshcheniya."

report submitted for the VIIth European Congress on Molecular Spectroscopy, Budapest, 22-27 Jul 1963.

S/076/63/037/002/011/018
B101/B186

AUTHORS: Bugay, P. M., Bazhenova, L. M., Gol'berkova, A. S., Konel'skaya, V. N., Naydenova, I. I. (Khar'kov)

TITLE: Electron spectra and nature of the absorption bands of aromatic amine derivatives. II. Electron spectra of diphenyl amine and its hydroxy and methoxy derivatives

PERIODICAL: Zhurnal fizicheskoy khimii, v. 37, no. 2, 1963, 378-386

TEXT: Based on the classification of absorption bands of diphenyl amine derivatives published in Zh. fiz. khimii, 36, 1562, 1962, the bands of the following compounds are discussed in detail: $C_6H_5NHC_6H_4X$, where X = H; o-, m-, or p-OH; o-, m-, or p-$CH_3O$, and $XC_6H_4NHC_6H_4Y$, where X = Y = o-, m-, or p-OH; X = o-, m-, or p-OH, Y = o-, m-, or p-$CH_3O$; X = Y = o-, m-, or p-$CH_3O$. The solutions used were: hexane, ethanol, 98% $H_2SO_4$, glacial acetic acid, or ethanol + 2 M sodium alcoholate. The data for λ, log ε, oscillator strength, electron transfer energy and band width are tabled.

Electron spectra and nature ...

S/076/63/037/002/011/018
B101/B186

In all substances, the fundamental band was the $A_{1g} \rightarrow B_{2u}$ benzene band which has high absorption and oscillator strength and appears between λ = 254 and λ = 300 mμ. Besides this, the A band (λ = 283-417 mμ) and the short-wave aniline band B (λ = 220-248 mμ) were observed, but not in all solvents. The long-wave D band (λ = 335-890 mμ) is observed in almost all dihydroxy, hydroxy-methoxy and dimethoxy derivatives of diphenyl amine. In the presence of two or three functional groups with equal electron-directing properties (OH, $OCH_3$, NH) one of the groups, when subjected to the effect of NH as a stronger electron donor acquires, the properties of a weak electron acceptor; this causes the appearance of the A band characteristic of functional groups with opposite sign. Also the dipole moment increases which was 1.95 D for p-hydroxy diphenyl amine, 1.79 D for 4-methoxy diphenyl amine, and 3.5 D for 4,4'-dihydroxy diphenyl amine. On formation of salts, the B band disappears or becomes weaker, when the salt formation is incomplete. In such cases, the oscillator strength decreases and a hypsochromic shift of the $A_{1g} \rightarrow B_{2u}$ band is observed. There are 2 tables.

S/076/63/037/003/012/020
B101/B215

AUTHORS: Bugay, P. M., Konel'skaya, V. N., Bazhenova, L. M., Gol'berkova, A. S., Naydenova, I. I.

TITLE: Effect of the type of aromatic amines (primary, secondary, tertiary) and their o-derivatives, m-derivatives, and p-derivatives on the absorption spectra

PERIODICAL: Zhurnal fizicheskoy khimii, v. 37, no. 3, 1963, 652-655

TEXT: This is a comparison of the widths and intensities of the 288 mμ benzene absorption bands in the spectra of aniline, diphenyl amine (DPA), triphenyl amine, o-aminophenol, 2-hydroxy-DPA, 2,2'-dihydroxy-DPA, 2-hydroxy-2'-methoxy-DPA, m-aminophenol, 3-hydroxy-DPA, 3,3'-dihydroxy-DPA, 3-hydroxy-3'-methoxy-DPA, p-aminophenol, 4-hydroxy-DPA, 4,4'-hydroxy-DPA, and 4-hydroxy-4'-methoxy-DPA dissolved in ethanol, hexane, 98% $H_2SO_4$, 100% $CH_3COOH$, and ethanol + 2 M alcoholate. Results: (1) The amino group is conjugated with all benzene rings, although to different degrees in the different compounds. The greatest increase in intensity of the band

Card 1/2

Effect of the type of aromatic ... S/076/63/037/003/012/020
B101/B215

occurs on transition from aniline to DPA. (2) The chemical activity of the compound and salt formation in $H_2SO_4$ and $CH_3COOH$ can be determined from the band intensity. (3) Increase in intensity of maximum absorption on transition from aminophenol to monohydroxy-DPA and decrease in intensity on transition to dihydroxy-DPA confirm that the amino group of DPA is conjugated with both benzene rings and that the conjugation is affected by the functional groups in o, m, or p positions. (4) In the ortho-hydroxy derivatives of aniline and DPA there exists an intramolecular hydrogen bond. (5) The band intensity decreases on salt formation. (6) Intensive changes showing no regular relation to the band intensity occur during the formation of quinoidal compounds and oxidation. There are 3 tables.

ASSOCIATION: Khar'kovskiy politekhnicheskiy institut im. V. I. Lenina (Khar'kov Polytechnic Institute imeni V. I. Lenin)

SUBMITTED: March 19, 1962

Card 2/2

BUGAY, P.M.; GOL'BERKOVA, A.S.; KONEL'SKAYA, V.N.; NAYDENOVA, I.I.

Absorption spectra and nature of absorption bands of aromatic amine derivatives oxidized in 98% sulfuric acid. Part 1. Zhur.fiz.khim. 37 no.10:2339-2343 0 '63. (MIRA 17:2)

1. Khar'kovskiy politekhnicheskiy institut imeni Lenina.

KONENKO, A.

M. Tovbin and A. Konenko, The kinetics of non-stationary heterogeneous processes. I. The kinetics of oxygen absorption by water. Pp. 1331-43.

A method has been worked out for the study of the kinetics of the non-stationary process of gas absorption by water. The method is based on the determination of the absorption rate of the gas by drops of liquid and makes it possible to shorten the time of contact of the reacting phases to 0.02-0.03 seconds. It is shown that admixtures of surface-active substances decrease considerably the rate of the non-stationary process of oxygen absorption. The influence of the admixtures of surface-active substances on the rate of process increases with increase of their surface-activeness and decreases sharply with increase of contact time of the drop with air.

Acad. of Sciences Ukranian S.S.R.
Inst. of Hydrobiology, Kiev
February 17, 1948

SO: Journal of Physical Chemistry (USSR) 22, No. 11, 1948

CA KONENKO, A. D. 2

**Kinetics of absorption of oxygen by water.** M. V. Tovbin and A. D. Konenko (Acad. Sci. Ukr. S.S.R., Kiev). *Zhur. Fiz. Khim.* 24, 403-8(1950); cf. *C.A.* 43, 2494*f*.—The app. was like a stopcock whose conical roller, 10 cm. long was placed horizontally. The tube above the roller was filled with air-free water (about 80 cc.), and through the tube below the roller air satd. with $H_2O$ streamed. When the roller was rotated by a motor, the water film covering it came in partial contact with air in the bottom tube and absorbed O, which, in further rotation, was conveyed to the main body of liquid. There the O concn. ($a$) was detd. The rate $v$ of absorption (in $10^{-9}$ g. O absorbed by cm.$^2$ in sec.) decreased when the time $\tau$ of exposure increased, e.g., from 11 at 0.02 sec. to 0.8 at 0.9 sec. If $a_0$ is the O concn. in equil. with air, $e^{\beta v} = a_0(1-\alpha\tau)/(a_0 - a)$, $\beta$ and $\alpha$ being const. When the water contained some O before the expt., $v$ was smaller; e.g., at $\tau = 0.04$ sec., $v$ was 9 in air-free $H_2O$ and 2 in $H_2O$ contg. O up to 40% of satn. Temp. increase (7-40°) lowered $v$ at small $\tau$ and slightly increased it at $\tau = 0.5$. Satn. of $H_2O$ with iso-AmOH or octanol lowered $v$ at the most to $^1/_6$ resp. $^1/_4$ of the value for $H_2O$. I. J. B.

KONENKO, A.D.; ROLL, Ya.V., otvetstvennyy redaktor; MOVCHAN, V.A., redaktor; VLADIMIROV, V.I., doktor biologicheskikh nauk, redaktor; TOVBIN, M.V., doktor khimicheskikh nauk, redaktor; KRAYUKHIN, B.V., kandidat biologicheskikh nauk, redaktor; FURS-FESENKO, N.S., redaktor; SIVACHENKO, Ye.K., tekhredaktor.

Hydrochemical characteristics of small rivers of the Ukrainian S.S.R. Trudy Inst. gidrobiol. AN URSR no.26:5-172 '52.
(MIRA 8:2)

1. Chlen-korrespondent Akademii nauk USSR (for Roll and Movchan).
(Ukraine--Rivers)(Water--Composition)

KONENKO, A. D.

No 5 (1)

√**Stability of supersaturated solutions in the system calcium carbonate-water-carbon dioxide.** M. V. Torbin and A. D. Konenko (*Ukr. Khim. Zh.*, 1954, 20, 578–582).—The high values for the bicarbonate equilibrium constant found for many summer samples of pond and stream water indicated that these were supersaturated with respect to Ca bicarbonate. It was established experimentally that the factor $\rho = (c - c_0)/c_0$, where $c$ is the concn. of a supersaturated solution and $c_0$ is the true solubility, has, for metastable solutions of Ca bicarbonate, a max. value of 2·4, above which the solutions become labile. The supersaturation is favoured by the fact that the solid phase which can be pptd. (i.e. $CaCO_3$) differs in composition from the solute.

F. W. KIRKBRIDE.

①

Inst. Hydrobiology AS UkrSSR.

KONENKO, A.D.

Materials on comparative hydrochemical characteristics of ponds of the forest steppe and steppe zones of the Ukrainian S.S.R. Trudy Inst.gidrobiol.AN URSR no.32:37-47 '55. (MIRA 9:9)
(Ukraine--Fish ponds)

KONENKO, Anna Dmitriyevna; PIDGAYKO, Mayya Leonidovna [Pidhaiko, M.L.]; RADZIMOVSKIY, Dmitriy Aleksandrovich [Radzymovs'kyi, D.A.]; YANKOVSKAYA, Z.B. [IAnkovs'ka, Z.B.], red. izd-va; MATVIICHUK, O.O., tekhn. red.

[Ponds of the Ukrainian Polesye; a hydrochemical and hydrobiological survey] Stavky Polissia Ukrainy; hidrokhimichnyi ta hidrobiologichnyi naris. Kyiv, Vyd-vo Akad. nauk URSR, 1961. 139 p. (MIRA 14:11)

(Polesye—Fish ponds)

KONENKO, A.D.

Some laws of the formation of the ion-salt composition of water in ponds of the Ukrainian S.S.R. Gidrobiol. zhur. 1 no.1:42-51 '65.

(MIRA 18:5)

1. Institut gidrobiologii AN UkrSSR, Kiyev.

KONENKO, A.F.

Relation between auroras and the characteristics of the ionospheric $E_s$-layer. Geomag. i aer. 5 no.1:186-187 Ja-F '65.

(MIRA 18:4)

1. Novosibirskiy gosudarstvennyy universitet.

VASHCHENKO, V.S.; KONENKO, A.V.; SHMALIY, V.Ya.

Using shortened thread of the detonating cord in multiple blasting of deep holes. Sbor.rats.predl.vnedr.v proizv. no.1:3 '61. (MIRA 14:7)

1. Rudoupravleniye im. Dzerzhinskogo, shakhta "Gigant."
(Blasting)

S/062/60/000/012/002/020
B013/B055

AUTHORS: Balandin, A. A., Tolstopyatova, A. A., Konenko, I. R.

TITLE: Investigation of Catalytic Transformations of Isopropyl Alcohol and Cyclic Hydrocarbons on Titanium Dioxide (Anatase) Using a Differential Thermocouple

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1960, No. 12, pp. 2096-2102

TEXT: The authors of the present paper investigated the dehydrogenation and dehydration of isopropyl alcohol (Tables 1-4) and the dehydrogenation and irreversible catalysis of hydrocarbons, cyclohexane (Table 5), cyclohexene (Tables 6 and 7) and 1,4-cyclohexadiene (Table 8) - on a modification of titanium dioxide (anatase) using a differential thermocouple (Chromel - cupronickel). The latter had 10 junctions each at both sides of the mica sheet to which it was attached. All the 20 junctions were on the one half of the sheet. The distribution of the catalyst in the quartz tube containing the thermocouple is shown in Fig. 1. A continuous reaction vessel was used for the kinetic experiments (Refs. 4 and 5). The temperature was maintained with

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Investigation of Catalytic Transformations of Isopropyl Alcohol and Cyclic Hydrocarbons on Titanium Dioxide (Anatase) Using a Differential Thermocouple

S/062/60/000/012/002/020
B013/B055

an accuracy of ±5°. The evolution rate and quantity of gaseous products were measured and recorded by a ГСП-10 (GSP-10) gas meter (Fig. 2). X-ray analysis of the catalyst prepared from titanium tetrachloride showed it to be anatase. The transformation of isopropyl alcohol on $TiO_2$ was accompanied by a marked change in thermal effect during the first 15-20 min (Table 1, Fig. 3a). The analysis of the gaseous products formed in the reaction showed that the alcohol is practically only dehydrogenated during the first 7-8 min. After this period dehydrogenation and dehydration take place simultaneously and after 15-20 min dehydration occurs alone. From a comparison of the thermocouple data with the analytical data of the reaction products and the degree of carbon deposition on the catalyst surface it can be seen that the rates of dehydrogenation and dehydration, and the carbon content of the surface run parallel. The change in selectivity at otherwise unchanged general activity of $TiO_2$ is probably due to the accumulation of carbon on the surface. Deposition of carbon on the surface of $Cr_2O_3$ (Fig. 3b), however, was found to have no effect on its activity and selectivity. Summarily, the

Card 2/3

Investigation of Catalytic Transformations of Isopropyl Alcohol and Cyclic Hydrocarbons on Titanium Dioxide (Anatase) Using a Differential Thermocouple

S/062/60/000/012/002/020
B013/B055

authors conclude that a gradual accumulation of carbon on the anatase surface almost entirely suppresses the dehydrogenation of the alcohol and promotes its dehydration, but does not affect the total activity of the catalyst. The catalyzed irreversible transformation of cyclohexene and cyclohexadiene is suppressed by the accumulation of carbon on $TiO_2$, whereas the dehydrogenation of cyclohexene, cyclohexane, and cyclohexadiene is promoted by this process. There are 3 figures, 7 tables, and 12 Soviet references.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences USSR)

SUBMITTED: June 26, 1959

Card 3/3

81725
S/020/60/133/01/36/070
B011/B003

5.1190

**AUTHORS:** Tolstopyatova, A. A., Balandin, A. A., Academician, Konenko, I. R.

**TITLE:** Catalytic Transformations of Alcohols and Cyclic Hydrocarbons on Titanium Dioxide

**PERIODICAL:** Doklady Akademii nauk SSSR, 1960, Vol. 133, No.1, pp. 130 - 133

**TEXT:** Although titanium dioxide is easily available, it belongs to the little investigated catalysts. The authors wanted to study its catalytic properties with various modes of preparation, in reactions with ethyl-, isopropyl, and n-propyl alcohol as well as with cyclohexane, cyclohexene, and 1,4-cyclohexadiene. Moreover, they wanted to investigate the kinetics of these reactions and the energies of the bonds of C-, H-, and O-atoms with the $TiO_2$ surface. The method of the differential thermocouple is used for the study of the catalytic reactions. Fig. 1 shows the position of the catalyst in relation to the thermocouple. The electromotive force (emf) was uninterruptedly recorded on

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Catalytic Transformations of Alcohols and Cyclic Hydrocarbons on Titanium Dioxide

S/020/60/133/01/36/070
B011/B003

a potentiometer of the type ЭПП-09 18 (EPP-09). Apparatus and methods are described in Ref. 4. By combining the above method with analytical methods the authors found that in isopropyl alcohol the surface of the catalyst is coated by carbon-containing sediments. In this way, the relation between dehydrogenation and dehydration of the alcohol is considerably influenced. Within the first 2 - 5 min it is only dehydrogenated. Subsequently, the two processes mentioned take place, and after 20-25 min there occurs dehydration only. Meanwhile, the total amount of the gas liberated per unit of time remains unchanged. All this proves that the centers that are active for dehydrogenation, are poisoned after decarbonization with respect to this reaction, but at the same time are capable of dehydrating the alcohol at the same rate (Table 1). Also the regeneration conditions of the catalyst were determined with the same apparatus: The carbon film was removed after each experiment by means of a strong air current, with the catalyst being previously brought to a temperature exceeding the one of the experiment by 40-50°C. Regeneration usually took 20-30 min. The authors studied the influence of the mode of preparation of $TiO_2$ on the catalytic properties on four samples: No. 1 - by precipitation of the hydroxide from $TiCl_4$ with

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Catalytic Transformations of Alcohols and Cyclic Hydrocarbons on Titanium Dioxide

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water, No. 2 - the same with ammonia. No. 3 by oxidation of freshly prepared $Ti(OH)_3$ (precipitated from $TiCl_3$ with ammonia) with air, and No. 4 by hydrolysis of orthoethyl titanate. It was established by X-ray structural analysis that anatase resulted in No. 1. Table 2 shows the reactions studied in certain temperature ranges, the activation energies $\varepsilon$ as well as $K_0$ of the Arrhenius equation; furthermore, the degree of decarbonization of each sample surface. It may be seen from these data and Table 4 that the mode of preparation exerts a great influence on the above-mentioned values and the binding energy. Table 3 shows the dependence of the adsorption coefficient z on $\Delta H^{\circ}$ (heat content), the entropy $\Delta S^{\circ}$, and the change in free energy $\Delta F^{\circ}$. The binding energy values were calculated for the first time (Table 4). There are 1 figure, 4 tables, and 11 references: 10 Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences, USSR)

SUBMITTED: April 2, 1960

Card 3/3

S/062/61/000/001/004/016
B101/B220

AUTHORS: Tolstopyatova, A. A., Konenko, I. R., and Balandin, A. A.

TITLE: Kinetics of dehydrogenation and dehydration of isopropyl alcohol on titanium dioxide (anatase)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, no. 1, 1961, 38-44

TEXT: By way of introduction the authors offer a survey of reports dealing with the catalytic efficacy of $TiO_2$, and then report on the dehydrogenation and dehydration of isopropyl alcohol on anatase. Regarding the production of the catalyst they refer to another report published by them. For the verification of the kinetics of monomolecular heterogeneous-catalytic reactions they proceed from the equation $k = A_1(Z_2-Z_3)\ln A_1/(A_1-m)-(Z_2+Z_3-1)m$ (1). $A_1$ is the volume of alcohol converted per minute, which is introduced at the rate v; m is the volume of propylene (or hydrogen) formed per minute; $Z_2$, $Z_3$ are the relative adsorption coefficients of the reaction products (hydrogen and acetone

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Kinetics of dehydrogenation and dehydration... S/062/61/000/001/004/016
B101/B220

in the case of dehydrogenation; propylene and water in the case of dehydration); $Z_2$ and $Z_3$ were calculated from $Z = (m_0/m-1)/(100/p-1)$ (2), where $m_0$, m are the amounts of the reaction products resulting on the passage of pure alcohol ($m_0$) and on the passage of a p molar mixture with the reaction product. Since Z is the equilibrium constant of the displacement of the isopropyl alcohol from the catalytic centers by the reaction products, it was possible to calculate also $\Delta F$ of the free energy, $\Delta S$ of entropy, and $\Delta H$ of the heat content. The adsorption coefficient $Z_{ac}$ of acetone was found to be highly dependent on temperature and much less so on the degree to which the catalyst was covered with carbon. The following is indicated for not carbonized $TiO_2$: $Z_{ac} = 2.4$ at 282°C; 1.7 at 294°C; 1.2 at 310°C. For carbonized $TiO_2$ these values amounted to 2.7, 1.8 and 0.9. The adsorption coefficient $Z_{H_2}$ of the hydrogen remains constantly 0.9 in the range of 276-306°C. Moreover, it was found that $Z_{H_2O} = 1.9$ at 282°C, 1.4 at 294°C, and 0.9 at 310°C, whereas $Z_{propylene}$ remains a constant 0.2 in the temperature range of 300-330°C. A. M. Rubinshteyn and S. G. Kulikov are mentioned.

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Kinetics of dehydrogenation and dehydration... S/062/61/000/001/004/016
B101/B220

There are 1 figure, 8 tables, and 24 references: 8 Soviet-bloc and 13 non-Soviet-bloc.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy, Academy of Sciences USSR)

SUBMITTED: June 29, 1959

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S/062/61/000/001/005/016
B101/B220

AUTHORS: Balandin, A. A., Konenko, I. R., and Tolstopyatova, A. A.

TITLE: Effect of the method of production on the catalytic properties of titanium dioxide in the reaction with ethyl alcohol, isopropyl alcohol, and cyclohexane

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, no. 1, 1961, 45-50

TEXT: The authors were concerned with the investigation of the catalytic properties of titanium dioxide. Here, they studied the dependence of those properties on the method of $TiO_2$ synthesis. Four specimens were used. Catalyst 1 (anatase), whose production is described in Ref. 1, a previous report of the authors; catalyst 2, obtained by hydrolysis of $TiCl_4$ by means of ammonia solution in a weakly acid medium at room temperature; catalyst 3, obtained by precipitation of $Ti(OH)_3$ from $TiCl_3$ by means of ammonia at room temperature and conversion to $Ti(OH)_4$ which occurred automatically

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while washing the precipitate; catalyst 4, obtained by hydrolysis of ethyl orthotitanate by means of distilled water at room temperature. The further treatment of the hydroxides for the purpose of obtaining $TiO_2$ was performed according to Ref. 1. Ethanol reacted with these catalysts according to three reactions: a) dehydrogenation, b) dehydration, c) hydrogenation of the resulting ethylene. Moreover, up to 2% ethyl acetate was formed on all four catalysts. The reaction of isopropanol corresponded to data mentioned in Ref. 1. Due to the growing accumulation of carbon on the catalyst, the rate of dehydration increases, whereas that of dehydrogenation decreases. Cyclohexane is dehydrogenated on all four catalysts. The differences between the catalysts regarding the activation energy $\varepsilon$ and the factor $k_0$ of the Arrhenius equation are listed in Table 8. The linear function $\log k_0 = a\varepsilon + b$ (a, b = constants) is conserved for all reactions. A. M. Rubinshteyn and S. G. Kulikov are mentioned. There are 2 figures, 8 tables, and 6 references: 4 Soviet-bloc and 2 non-Soviet-bloc.

Effect of the method of production... S/062/61/000/001/005/016
B101/B220

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy, Academy of Sciences USSR)

SUBMITTED: July 9, 1959

Card 3/5

Effect of the method of production...

S/062/61/000/001/005/016
B101/B220

**Влияние способа приготовления катализатора $TiO_2$ на величины энергий активации**

| 1<br>Состояние поверхности катализатора * | 2<br>Реакции | e, ккал/М |  |  |  | $k_0$ |  |  |  |
|---|---|---|---|---|---|---|---|---|---|
|  |  | 3 катализатор |  |  |  | 3 катализатор |  |  |  |
|  |  | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 4 ч. о. | 7 Дегидрогенизация этилового спирта | 22,8 | 20,4 | 9,4 | 12,4 | $1,0\cdot10^{8}$ | $1,9\cdot10^{7}$ | $1,4\cdot10^{3}$ | $1,2\cdot10^{4}$ |
| 4 ч. о. | 8 Дегидратация этилового спирта | 25,0 | 25,4 | 6,9 | 12,5 | $1,5\cdot10^{9}$ | $5,6\cdot10^{8}$ | $3,7\cdot10^{3}$ | $4,4\cdot10^{4}$ |
| 5 п. о. | 9 Дегидратация изопропилового спирта | 22,9 | 9,1 | 26,2 | 17,2 | $3,7\cdot10^{9}$ | $9,1\cdot10^{9}$ | $1,0\cdot10^{10}$ | $2,8\cdot10^{7}$ |
| 4 ч. о. | 10 Гидрогенизация этилена | 21,2 | 24,2 | 13,0 | 16,8 | $1,8\cdot10^{7}$ | $1,0\cdot10^{5}$ | $1,3\cdot10^{4}$ | $2,7\cdot10^{5}$ |
| 4 ч. о. | 11 Дегидрогенизация циклогексана | 19,0 | 14,7 | 21,6 | 15,0 | $8,7\cdot10^{6}$ | $5,1\cdot10^{4}$ | $1,3\cdot10^{6}$ | $3,5\cdot10^{4}$ |
| 4 ч. о. | 12 Дегидрогенизация изопропилового спирта | 9,1 | 10,4 | — | — | $1,0\cdot10^{4}$ | $2,2\cdot10^{4}$ | — | — |
| 4 ч. о. | 9 Дегидратация изопропилового спирта | 24,4 | 15,3 | — | — | $4,5\cdot10^{9}$ | $6,9\cdot10^{5}$ | — | — |
| 6 н. о. | 12 Дегидрогенизация изопропилового спирта | 11,9 | — | — | — | $1,9\cdot10^{5}$ | — | — | — |
| 5 п. о. | 11 Дегидрогенизация циклогексана | 25,2 | — | — | — | $4,9\cdot10^{7}$ | — | — | — |
| 4 ч. о. | 13 Дегидрогенизация пропилового спирта | 19,4 | — | — | — | $2,3\cdot10^{6}$ | — | — | — |
| 4 ч. о. | 14 Дегидратация н.пропилового спирта | 12,1 | — | — | — | $4,5\cdot10^{4}$ | — | — | — |

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Effect of the method of

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| $\varepsilon/\lg k_0 \cdot 10^3$ | | | |
|---|---|---|---|
| 3 катализатор | | | |
| 1 | 2 | 3 | 4 |
| 2,84 | 2,81 | 3,01 | 3,05 |
| 2,73 | 2,90 | 2,70 | 2,70 |
| 2,39 | 2,28 | 2,54 | 2,31 |
| 2,91 | 3,01 | 3,01 | 3,10 |
| 3,20 | 3,12 | 3,53 | 3,30 |
| 2,24 | 2,40 | — | — |
| 2,53 | 2,62 | — | — |
| 2,25 | | | |
| 3,27 | — | — | — |
| 2,71 | — | — | — |
| 3,05 | 2,73 | 2,96 | 2,89 |
| 2,60 | | | |

Legend to Table 8: Effect of the method of preparing the $TiO_2$ catalyst on the amounts of activation energies. 1) Condition of catalyst surface; 2) reaction; 3) catalyst; 4) partially carbonized; 5) completely carbonized; 6) not carbonized; 7) dehydrogenation of ethanol; 8) dehydration of ethanol; 9) dehydration of isopropanol; 10) hydrogenation of ethylene; 11) dehydrogenation of cyclohexane; 12) dehydrogenation of isopropanol; 13) dehydrogenation of propanol; 14) dehydration of n-propanol.

Card 5/5

TOLSTOPYATOVA, A.A.; BALANDIN, A.A.; KONENKO, I.R.

Energies of the bonds between reacting organic compounds and the catalytic active centers of titanium dioxide. Izv. AN SSSR. Otd. khim. nauk no.2:214-217 F '61. (MIRA 14:2)

1. Institut organicheskoy khimii im.N.D.Zelinskogo AN SSSR.
(Titanium oxide) (Chemical bonds)

TOLSTOPYATOVA, A.A.; KONENKO, I.R.; BALANDIN, A.A.

Bond energies of carbon, hydrogen, and oxygen atoms of organic molecules with yttrium oxide. Kin.i kat. 3 no.1:103-106 '62. (MIRA 15:3)

1. Institut organicheskoy khimii imeni N.D.Zelinskogo AN SSSR. (Chemical bonds) (Yttrium oxede) (Catalysis) (Organic compounds)

BALANDIN, A.A.; KONENKO, I.R.; TOLSTOPYATOVA, A.A.

Kinetics of dehydrogenation and dehydration of ethyl and isopropyl alcohols on yttrium oxide. Kin.i kat. 2 no.6:900-906 N-D '61.
(MIRA 14:12)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR.
(Ethyl alcohol) (Isopropyl alcohol)
(Dehydrogenation) (Dehydration (Chemistry))

KONENKO, I.R.; TOLSTOPYATOVA, A.A.; BALANDIN, A.A.

Scandium oxide as a catalyst of dehydrogenation and dehydration. Izv. AN SSSR. Ser. khim. no.11:1899-1905 N '63. (MIRA 17:1)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR.

KONENKO, L.D.

## PHASE I BOOK EXPLOITATION SOV/4012

Akademiya nauk Ukrainskoy SSR. Otdeleniye fiziko-matematicheskikh nauk.
Sessiya po mirnomu ispol'zovaniyu atomnoy energii

Trudy (Transactions of the Session on Peaceful Uses of Atomic Energy), Kiyev,
Izd-vo AN Ukrainskoy SSR, 1958. 188 p. 2,500 copies printed.

Resp. Ed.: M. V. Pasechnik, Doctor of Physics and Mathematics; Editorial Board: A. K. Val'ter, Academician, Academy of Sciences Ukrainskaya SSR, O.F. Nemets, Candidate of Physics and Mathematics, M. V. Pasechnik, Doctor of Physics and Mathematics; Ed. of Publishing House: T. K. Remennik; Tech. Ed.: N. P. Rakhlina.

PURPOSE: This collection of articles is intended for physicists and scientific personnel working in nuclear research.

COVERAGE: The articles in this collection discuss linear proton accelerators, electron accelerators, electrostatic accelerators, magnetron lenses, the interaction of charged particles and neutrons with nuclei, the applications of tagged atoms in physics research, and experimental methods. Some of the articles are descriptions of already existing nuclear installations and experimental apparatus. No personalities are mentioned. There is a bibliography of Soviet and non-Soviet sources at the end of most of the articles.

Nemets, O.F. Selective Spectrometer for Charged Particles 145

Gofman, V.I., V.D. Novitskiy, and N.G. Ofengenden. Multichannel Time Analyzer 154

Ofengenden, N.G., L.D. Konenko, and V.G. Kotova. Multichannel Amplitude Analyzer With a Magnetic Drum Memory Unit 161

Afanas'yev, N.G., and V. Yu. Gonchar. Multichannel Amplitude Analyzer With Ultrasonic Memory and Scintillation Spectrometer 169

Galkin, A.A., D.A. Kichigin, and L. Ya. Matsakov. Using Nuclear and Electron Resonances in Measuring Wavelengths in the Microwave Band 180

Rudenko, N.S., V.N. Grigor'yev, D.G. Dolgopolov, and I.V. Bogoyavlenskiy. Change in the Isotopic Composition of Mercury in a DC Electric Field 183

PASECHNIK, M.V. [Pasichnyk, M.V.]; OFENGENDEN, R.G. [Ofenhenden, R.H.];
KONENKO, L.D.

AIMA-2 pulse-height analyzer [with summary in English]. Ukr. fiz. zhur. 4 no.1:57-71 Ja-F '59. (MIRA 12:6)

1. Institut fiziki AN USSR.
(Radioactivity--Measurement) (Electronic instruments)

33145
S/120/61/000/006/011/041
E039/E420

24683

AUTHORS: Ofengenden, R.G., Konenko, L.D.

TITLE: A multichannel amplitude analyser for the simultaneous measurement of several spectra

PERIODICAL: Pribory i tekhnika eksperimenta, no.6, 1961, 65-69

TEXT: The authors give the description of an amplitude pulse analyser for the simultaneous measurement of several spectra as, for example, in nuclear physics experiments where it may be necessary to obtain the amplitude distribution of pulses arriving from several detectors. It makes use of a magnetic drum storage system, with a series of recording heads and corresponding reproduction heads (1.5 mm wide ferrite cores). The capacity of each track on the drum is 900 double figures and erasure is accomplished by means of a uniform magnetic field. Tha analysis and reproduction of the data from a number of counters is handled by a common apparatus, so that the unit is not much larger than a single channel device. A block-diagram is shown in Fig.2 which illustrates the essential differences from a single channel analyser. It allows the facility of measuring spectra from two

Card 1/~~4~~ 2

X

Card 2/~~4~~ 2

X

S/120/63/000/001/011/072
E140/E135

AUTHORS: Pasechnik, M.V., Ofengenden, R.G., Konenko, L.D., and Shaleyko, M.A.

TITLE: Pulse amplitude analyzer АИМА-2 (AIMA-2)

PERIODICAL: Pribory i tekhnika eksperimenta, no.1, 1963, 57-60

TEXT: This paper was presented at the 4th conference on nuclear electronics at Moscow in 1959, and describes an instrument completed in 1955. The basic memory unit of the analyzer is a magnetic drum, and the pulse discrimination is carried out by a method described in 1951 (G.W. Hutchinson, G.G. Scarrott, Philos. Mag., 1951, v.42, no.330, 792). There are 3 figures.

ASSOCIATION: Institut fiziki, AN USSR
(Physics Institute, AS UkrSSR)

SUBMITTED: March 15, 1962

Card 1/1

MAL'NEV, A.F.; KREMENCHUGSKIY, L.S.; BEREZKO, B.N.; SHEVTSOV, L.N.; BOGDEVICH, A.G.; KIRILLOV, G.M.; CHASHECHNIKOVA, I.T.; YARMOLENKO, N.A.; OFENGENDEN, R.G.; SERMAN, V.Z.; DALYUK, Yu.A.; BEREZIN, F.N.; KONENKO, L.D.; SHALEYKO, M.A.; SHEVCHENKO, Yu.S.; STOLYAROV, V.A.; KIRILLOV, G.M.; BOGDEVICH, S.F.; LYSENKO, V.T.; BRASHKIN, N.A.; SKRIPNIK, Yu.A.; GRESHCHENKO, Ye.V.; TUZ, R.M.; SERPILIN, K.L.; GAPCHENKO, L.M.

Abstracts of completed research works. Avtom. i prib. no.3:90-91 Jl-S '62. (MIRA 16:2)

1. Institut fiziki AN UkrSSR (for all except Skripnik, Greshchenko, Tuz. Serpilin, Gapchenko). 2. Kiyevskiy politekhnicheskiy institut (for Skripnik, Greshchenko, Tuz, Serpilin, Gapchenko).

(Research)

KONENKO, O.

B.T. B.M.I. 1231

I. I. Kornilov, V. Mikheev, and O. Konenko, Constitution Diagram of Ternary System of Iron-Chromium-Aluminum Alloys - Preliminary Communication. STAL, Vol. 10, 1940, Nos. 5-6, pp. 57-59; 1950 words.

KONENKO, O.R.; GRANOVSKIY, V.L.

Concentration waves of charge carriers in a moving ionized gas.
Radiotekh. i elektron. 7 no.10:1795-1798 O '62. (MIRA 15:10)
(Gases, Ionizied)

L 31518-66 EWT(1)/ETC(f) IJP(c) AT

ACC NR: AP6008822 SOURCE CODE: UR/0294/66/004/001/0012/0019

AUTHOR: Konenko, O. R.; Musin, A. K.

ORG: All-Union Electrotechnical Institute im. V. I. Lenin (Vsesoyuznyy elektrotekhnicheskiy institut)

TITLE: Charged particle concentration waves in a moving plasma

72

SOURCE: Teplofizika vysokikh temperatur, v. 4, no. 1, 1966, 12-19

B

TOPIC TAGS: moving plasma, plasma charged particle, plasma concentration, plasma diagnostics, ionized gas

ABSTRACT: The authors investigate the flow of a quasineutral ionized gas, moving along magnetic force lines, with induced perturbation of the concentration of charged particles. It is assumed that the perturbation is due to the modulation of the concentration in some initial plane with a steady-state normal diffusion distribution of the concentration along the cross section. The charged particles are recombined on the walls of the channel as a result of ambipolar diffusion. The electron temperature decreases along the flow, as a result of which the coefficient of ambipolar diffusion decreases. Boundary conditions of the third type exist on the walls which confine the flow. Plane and cylindrical geometries of the channel are considered. A general expression is derived for parameters which characterize the mechanism of concentration wave propagation, and basic limiting cases are analyzed. A general

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UDC 533.95.533.915

L 2497-66 EWT(d)/EWT(1)/EEC(k(-2/ETC/EPF(n)-2/EWG(m)/EPA(w)-2 IJP(c) AT

ACCESSION NR: AP5020735 UR/0057/65/035/008/1451/1453

44,55 67

AUTHOR: Akimov, A. V.; Konenko, O. N. 44,55 64

TITLE: Measurement of the conductivity of a gas discharge plasma by a radiofrequency method qw B

21,44,55

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 8, 1965, 1451-1453

TOPIC TAGS: plasma diagnostics, plasma conductivity, gas discharge plasma, frequency shift, high frequency

ABSTRACT: The authors have tested a plasma diagnostic technique proposed by V.H.Blackman (MHD Research, Newport Beach, California), whereby the conductivity of the plasma is determined by observing the resonant frequency shift of a tank circuit when the plasma is introduced into the helical winding that provides the inductance. Resonant frequencies from 7 to 80 Mc/sec were used and the plasma investigated was the positive column of a mercury-argon gas discharge tube. The apparatus was calibrated by introducing electrolytes of known conductivity into the tank coil, and the conductivity of the plasma was monitored by measuring the potential distribution along the positive column with probes. It was found that in-

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troducing either the plasma or the electrolyte could either increase or decrease the resonant frequency. Decrease of the resonant frequency is ascribed to the capacity effect pointed out by R.S.Hausler (Zs. angew. Phys., 9, 66, 1957). The plasma conductivities measured at the higher frequencies were much lower than the true conductivity of the plasma. This is ascribed to the skin effect, and it is concluded that more care is required in employing this technique than was exercised by Blackman (loc. cit.). By measuring the conductivity with different resonant frequencies (i.e., with different skin depths) one can derive information concerning the radial distribution of conductivity in the plasma column. The authors also mention a similar technique proposed by K.V.Donskoy, Yu.A.Dunayev, and A.N. Prokof'yev (ZhTF 32, 1095, 1962), wherein the change in the Q of the resonant circuit is to be measured, rather than the change in the resonant frequency; they do not report any experiments with this method, however. Orig. art. has: 1 formula and 3 figures.

ASSOCIATION: Vsesoyuznyy elektrotekhnicheskiy institut imeni V.I.Lenina, Moscow (All-Union Electrotechnical Institute)

44,55

SUBMITTED: 23Sep64 ENCL: 00 SUB CODE: ME

NR REF SOV: 001 OTHER: 002

Card 2/2 OC

ACCESSION NR: AP3009496 S/0188/63/000/005/0090/0095

AUTHOR: Konenko, O. R.

TITLE: Deionization of a stationary flow of plasma with consideration of the drop in electron temperature

SOURCE: Moscow. Universitet. Vestnik. Seriya 3. Fizika, astronomiya, no. 5, 1963, 90-95

TOPIC TAGS: deionization, plasma, plasma flow, electron temperature, diffusion, polar diffusion, temperature shift, ionization, Bessel function, heat equation, stationary flow

ABSTRACT: This article deals with the deionization of a stationary flow of plasma due to ambipolar diffusion, taking into consideration the drop in electron temperature (i.e. with variable coefficients of diffusion). It is shown that the existence of an electron temperature gradient is equivalent to an increase in the velocity of flow of the plasma, which retards the concentration of charge carriers along the axis of flow. In previous investigations, it was assumed that electrons and ions were carried out, together with neutral gas, from the ionization region with constant velocity, and recombined on the sides of a tube of known radius. In the deionization process, the electron temperature and the coefficient of ambipolar diffusion decrease noticeably and become constant only when the plasma is

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ACCESSION NR: AP3009496

almost completely deionized. A negative gradient of electron temperature increases the efflux of charge carrier from the region of ionization, and thus delays the deionization. The problem is stated as follows: For the case D $\neq$ constant, $\frac{\partial n}{\partial t} + \mathrm{div}\,(n\vec{V} - D\,\mathrm{grad}\,n) = 0$, where n = concentration of charge carriers, D = coefficient of ambipolar diffusion, and V = average transfer velocity of gas in which diffusion is studied. If the equation is written in cylindrical coordinates and it is assumed that the vector of the velocity field is independent of time and coordinates and that the coefficient of diffusion changes only along flow toward the OZ axis, we have:

$$\frac{\partial n}{\partial t} + \left(V - \frac{dD}{dz}\right)\frac{\partial n}{\partial z} = D\left(\frac{\partial^2 n}{\partial r^2} + \frac{1}{r}\frac{\partial n}{\partial r} + \frac{\partial^2 n}{\partial z^2}\right).$$

For the stationary case of distribution of concentration of charge carriers in the flow:

$$\frac{\partial^2 n}{\partial r^2} + \frac{1}{r}\frac{\partial n}{\partial r} + \frac{\partial^2 n}{\partial z^2} + \left(\frac{1}{D}\frac{\partial D}{\partial z} - \frac{V}{D}\right)\frac{\partial n}{\partial z} = 0,$$

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with a longitudinal gradient of coefficient of diffusion. If the electron temperature decreases along the flow, then $\frac{dD}{dZ}$ is negative. Thus, a decrease in electron temperature in the flow of deionized plasma is equivalent to an increase in its velocity. The ionized gas moves with constant velocity V. along a round tube of radius $r_0$. Axis OZ is directed along the geometric axis of this tube. In region $z < 0$, the gas is ionized; in region $z > 0$, the ionization factor is absent, and the gas gradually becomes deionized because of the loss of charge at the sides. The above equation is solved by separating the variables: $n(r, z) = R(r) Z(z)$ with simple regional conditions

$$n(r_0, z) = 0,$$

$$n(r, 0) = n_0 J_0\left(\frac{\mu}{r_0} r\right); \qquad \mu = 2,405\ldots$$

In this case, the equation for the longitudinal component of concentration distribution is:

$$\frac{d^2 Z}{dz^2} + \left(\frac{V}{D} - \frac{1}{D}\frac{dD}{dz}\right)\frac{dZ}{dz} - \lambda Z = 0; \ \lambda = \left(\frac{\mu}{r_0}\right)^2.$$

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For the radial component, distribution is given by the Bessel function of order zero,

$$J_0\left(\frac{\mu}{r_0} r\right).$$

Orig. art. has: 19 formulas.

ASSOCIATION: Kafedra elektroniki, Moskovskiy universitet (Department of Electronics, Moscow University)

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| SUBMITTED: | DATE ACQ: 08Nov63 | ENCL: 00 |
| SUB CODE: MA, NP | NO REF SOV: 005 | OTHER: 002 |

Card 4/4

AUTHOR: Konenko, O. R.

TITLE: Diffusion flow of a helium plasma in the presence of an electron temper- [illegible] gradient [illegible] AP5006780

NR REF SOV: 003 OTHER: 002

Card 2/2

KONENKO, S., narodnyy khudozhnik SSSR

While you relax. IUn. nat. no.5:39 My '63. (MIRA 16:7)

(No subject headings)

KONENKO, V.O.

Tension in elastic rods subjected to forced vibrations. Sbor. trud. Inst. stroi. mekh. AN URSR no.15:102-120 '51. (MIRA 11:4)
(Elastic rods and wires--Vibration)

Kononenko, V. O.

Mathematical Reviews
[illegible]
Analysis

4

④

**Kononenko, V. O.** On a case of coupled oscillations. Dopovidi Akad. Nauk RSR 1951, 74-81 (1951). (Ukrainian. Russian summary)

Application of the approximation methods of Krylov-Bogolyubov to a pair of differential equations of quasi-harmonic type. It is shown in particular that certain coordinates seemingly non-coupled under linear approximation are actually coupled.

*S. Lefschetz.*

1, KONONENKO V.O.

2. USSR (600)

4. Vibration

7. An instance of connected vibrations. Dop. AN URSR no.2, 1951

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

KONONENKO, V.O.; BYELYANKIN, F.P., diysnyy chlen.

Parametric vibrations in certain mechanical systems. Dop.AN URSR no.3:212-218 '51. (MLRA 6:9)

1. Akademiya nauk Ukrayins'koyi RSR (for Byelyankin). 2. Instytut budivel'noyi mekhaniky Akademiyi nauk Ukrayins'koyi RSR (for Kononenko).

(Vibration)

1. KONONEKO, V. O.

2. USSR (600)

4. Oscillations

7. Forced oscillations of an armature in a magnetic field. Sbor. trud. Inst. stroi. mekh. AN URSR, No. 16, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

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[illegible]

Combined flexure and torsional vibrations. Poper.koleb.i krit.skor. no.2:194-237 '53.
(MLRA 7:4)
(Vibration) (Disks, Rotating)

KONONENKO, V.O.

[redacted]

On the impulse vibration absorber. Dop.AN URSR no.6:446-450 '53.
(MLRA 7:1)

1. Institut budivel'noi mekhaniki Akademii nauk Ukrains'koi RSR. Predstaviv diysniy chlen Akademii nauk Ukrains'koi RSR F.P.Belyankin.
(Vibration) (Shock absorbers)

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"Self-Oscillations in Mechanical Systems Caused by Friction." Dr Tech Sci, Inst of Construction Mechanics, Acad Sci Ukrainian SSR, 2 Feb 54. (Pravda Ukrainy, 24 Jan 54)

SO: SUM 168, 22 July 1954

3178. Kasmenko [illegible]

oscillations with harmonic oscillations [illegible]

[illegible]

103, 1954, Ref. Zh. Mekh. 195[illegible], Rev. no. 2033.

[illegible]

locity ω. The centers of the pulleys are pla ed at a constant dis-

[illegible]

the frictional force.

KONONENK

The modified Eq [illegible]
tion of the system. When integrating [illegible]
as the initial approxima[illegible]
determined by [illegible]
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the frequen[illegible]

[illegible] [illegible] $\omega_1 + \omega_2$, where $\omega_1$ is the frequency of the free
torsion oscillations of the hollow [illegible]